

Title: US Rice Improvement Programs

Author: J. NEIL RUTGER

Technical abstract: Goals of US rice improvement programs include breeding for yield, grain quality, disease resistance and stress tolerance. The US has two major production areas: California with primary emphasis on medium grain cultivars; and the southern US states of Arkansas, Louisiana, Mississippi, Missouri, and Texas, with primary emphasis on long grain cultivars. Most US breeding programs concentrate on japonica germplasm, although there is recent interest in greater integration of indica germplasm into improvement efforts. The recognition that 14% of the rice being eaten in the US is imported, mostly aromatics, means that US breeders are actively seeking to develop adapted aromatic rices.

Interpretive summary: Goals of US improvement programs are directed at improving yield, quality, disease resistance and stress tolerance. Germplasm and approaches vary between California and the southern US region.